

195
mo. and P3. In addition, the contrast of the interferograms and the subsequent moiré image were reduced because of the limited coherence length of the [HE-Ne] He-Ne laser and the dissimilar optical paths. A gap of approximately 100mm between P1 and P2 caused a marginal degradation of fringe contrast.--

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A measurement method comprising the steps of:
arranging an interferometer to form a non-speckle first interference fringe pattern comprising at least ten interference fringes;
recording an image of said first interference fringe pattern;
perturbing an optical path in the interferometer to form a non-speckle second interference fringe pattern comprising at least ten interference fringes; and
combining an image of said second interference fringe pattern with the recorded image of the first interference fringe pattern to produce a further image comprising a moiré fringe pattern arising from a difference or differences between the first and second interference fringe patterns.

18. (Amended) A measurement method comprising the steps of:
arranging an interferometer to form a non-speckle interference fringe pattern comprising at least ten interference fringes;

perturbing an optical path in the interferometer to alter the interference fringe pattern;

combining the recorded image with each one of a sequence of images of the interference fringe pattern at respective different times to produce a sequence of respective further images each comprising a moiré fringe pattern arising from a difference between the recorded image and the respective one of the sequence of images.

23. (Amended) Measurement apparatus comprising:

an interferometer arranged to form non-speckle interference fringe patterns comprising at least ten interference fringes;

a camera arranged to capture images of the interference fringe patterns;

an image store arranged to store an image of the interference fringe pattern captured by the camera at a selected time;

an image processor arranged to combine the stored image with an image of the interference fringe pattern captured by the camera at a different time to produce a further image comprising a moiré fringe pattern arising from a difference or differences between the interference fringe patterns at the selected and said different time.